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NOTES:

TORQUE ACCORDING TO TORQUE TABLE ON SHEET 4

2. APPLY O-RING LUBRICANT F/N 60 ON ALL O-RINGS DURING ASSEMBLY

APPLY ANTISEIZE F/N 61 TO FAYING SURFACES

4 APPLY LOCTITE F/N 64 ON THREADS

5 APPLY TORQUE SEAL F/N 62

6 IDENTIFY IAW MPP-120; LASER ENGRAVE ALL REQUIRED INFORMATION

REFER TO CONFIGURATION SPECIFIC VIEWS FOR DETAILED ASSEMBLY INSTRUCTIONS, SHEET 12-16

8 APPLY DIELECTRIC GREASE F/N 59 TO FAYING SURFACES

BACK-UP RINGS F/N 46 MUST BE CLOCKED 60° - 120° OUT OF ALIGNMENT WHEN INSTALLED

APPLY LOCTITE F/N 63 ON THREADS

ASSEMBLE IAW MPP-179

SAFETY WIRE F/N 39 TO F/N 36 USING F/N 71

ORIENT PRESSURE GAUGE AS SHOWN.

		1	1 1	1	1	1		1	1	1			1	1	1		1	1	1	1		601.33/4	O-RING	NU6/4-/U5-	173	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		601.3373	O-RING	AS568A-9		
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		601.3376	O-RING	AS568A-0		
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	_	601.3380	BAYONET SPRING			
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	ΗĖ		650.7201	BAYONET ASSEMBLY	ALT. 649.57	701	
1	1	1	1	1	 i	1	1	1	1	1	1	1	1	1	<u>'</u>	1	<u> </u>	1	1	T i		650.9511	MAIN SEAL POPPET	ALT. 648.90		
4	4	4	4	4	4	4	4	4	4	4	4	4		4	4	4	4	4	4	4	_	601.3379	TRIGGER BALL	ALI. 040.70	/11	
1	1	1	1	1	1	1	1	1	1	1	_	1	1	1	1	1	1	1	1	1		650.7010	PUNCTURE DISC	ALT (40.0	-10	
+	-	1	+	1	1	+ +	+ ;	-	+ +	++	1		1	+ ;	-	+-	+-;-	+	 	+-	_			ALT. 649.05		\triangle
			- <u> </u> -	-		+-	+ !-	 	++		1	-	1	!	-	+-	+-	1		+-		650.7110	DISC RETAINER	ALT. 648.89		/1\//10\
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		601.1091	O-RING	AS568A-9	10	
1			1	1	<u> </u>				1	1	1	1	1	1	1	1	1	1	1	1	_	601.2587	SNAP RING			
1			1	1					1	1	1	1	1	1	1	1	1	1	1	1	_	601.1882	BANJO WASHER	NAS1149C0	363R	
					1	1	1	1													_		BANJO -10			
									1			1			1			1				650.6212	BANJO -8	ALT. 645.63		
			1							1			1			1			1			650.6211	BANJO -6	ALT. 645.63		
1				1							1			1			1			1	19	650.6210	BANJO -4	ALT. 645.63	310	
	1	1			1	1	1	1													18	650.6316	SWIVEL FITTING ASSY			
									1			1			1			1			17	650.6302	SWIVEL FITTING ASSY	ALT.645.64	02	
1			1	1						1	1		1	1		1	1		1	1	16	650.6301	SWIVEL FITTING ASSY	ALT. 645.64	401	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		600.0266	FUSIBLE PLUG	A-51057-		4 5
	<u> </u>	<u> </u>	ΤĖ		1	<u> </u>	1	<u> </u>	1	1	i	<u> </u>		<u> </u>	1	1	1	<u> </u>	<u> </u>	<u> </u>	_	650.6515	EXTENDED GAUGE ADAPTE			4 5
		<u> </u>	 		_	1	 	1	 '	<u>† </u>	†	1	1	1	<u> </u>	<u> </u>	<u> </u>	1	1	1		650.6512	GAUGE ADAPTER	ALT. 645.75	512	4 5
1			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		601.3739	GAUGE	B51051-60		4 5
1	1	1	1	1	1	<u>'</u>	+ ;	1	1	+ +	i	1	1	1	1	1	1	1	1	1	_		O-RING	A\$568A-0		32-32-01
2	4	3	+-	1	2	2	2	2	2	1	1	2	1	1	2	1	1	2	1	1		601.1088	O-RING	AS568A-9		
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1	1	1	+	1	1	1	1	1	1	1	1	1	1	<u> </u>	+	1	1	1	1	1	_	601.1084	O-RING	AS568A-0		
1	1	1	<u> </u>		1	1	1		1	1	1	1	1	1		1	1	1	1	1	8	600.0289	FILL PISTON FITTING	A-51153		
1	1	1	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	17	600.0288	PLUG FITTING	A-51152	A	1 5
1	1	1	1	1	1	1	1	- 1	1	1	1	1	1	1	1	1	1	1	1	1	6	600.0260	FILL PORT	A51151-		_4_5\
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	_	650.6511	FILL PORT ADAPTER	ALT 645.75		
2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2		601.2940	O-RING	AS568A-0		
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	_	601.2939	O-RING	AS568A-0		
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	600.0248	SAFETY DISC	A-51109-50		
. 1	1	1		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	650.6410	SAFETY DISC RETAINER (6K))	<u> </u>	4 5
X																						650.5321	MECANICAL VALVE ASSY -	4		<u>_7</u>
	X																					650.5320	THERMOMOMETER VALVE AS	SY		<u> </u>
		X																				650.5319	VALVE ASSY -8/-10 FLARELES	SS		7
			X		-														- CHEOTH			650.5318	90 DEGREE GAUGE VALVE ASS	SY -6		$\overline{\Delta}$
				Х					T													650.5317	ANGLED GAUGE VALVE ASSY	Y -4		7
					X		1											1		1		650.5316	LONG GAVUE VALVE ASSY -			
						X	 	_			<u> </u>				-	1	-	 	<u> </u>	 	†	650.5315	VALVE ASSY -10			
					1	<u> </u>	X		_	1				-		_	1	 	_	 	+	650.5314	LONG GAUGE VALVE ASSY -	-10		
-					-	<u> </u>	A	X						_	-	 				 	+	650.5313	VALVE ASSY -10			
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			-	-	-	-	+	+	 ^	X	+-	_		 			-	+	+	+	+-	650.5311	LONG GAUGE VALVE ASSY			
-	-	-	-		-	-	+	-	+	 ^	V	-	-	-	-	+	-	+	-	+	-	650.5311	LONG GAUGE VALVE ASSY			
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				-	+	-	-	-		-	-	X	,,			-				+	+	650.5309	VALVE ASSEMBLY -8			
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					-						-			X		-	ļ				-	650.5307	VALVE ASSEMBLY -4			
															X						-	650.5306	LONG GAUGE VALVE ASSY			
																X						650.5305	LONG GAUGE VALVE ASSY			
																	X					650.5304	LONG GAUGE VALVE ASSEMB	LY -4		
																		X				650.5303	VALVE ASSEMBLY -8			
																			Х			650.5302	VALVE ASSEMBLY -6			
																				X		650.5301	VALVE ASSEMBLY -4			
.5321	.5320	.5319	.5318	.5317	.5316	.5315	.5314	.5313	.5312	.5311	.5310	.5309	.5308	.5307	.5306	.5305	.5304	.5303	.5302	.5301	F/N	P/N	DESCRIPTION	MAT'L		SPEC
		•	-				-			-	•	-	-	•	-		-	· T	QT			•	PARTS LIST			
																			اپی	-		ORIGIN	IAL DATE			
																			NEX	(T ASS	Y (S) DRAW	A-YR) 05-30-14 N BY CHECKER) A DT 30		PRISE CT.,
																						J. GAR	DINER P. BRAVO	AFROSPICA	SUITE VISTA, CA	= A 4 92091
																						DRAWI	NG APPROVAL AF	AEROSPACE PICAL INDUSTRIES, INC.	(760)-72	
												05-30-1	4 di	ba DART AEROSPACE	,,											

O-RING

N0674-705-193

SCALE NONE

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES ± .5*

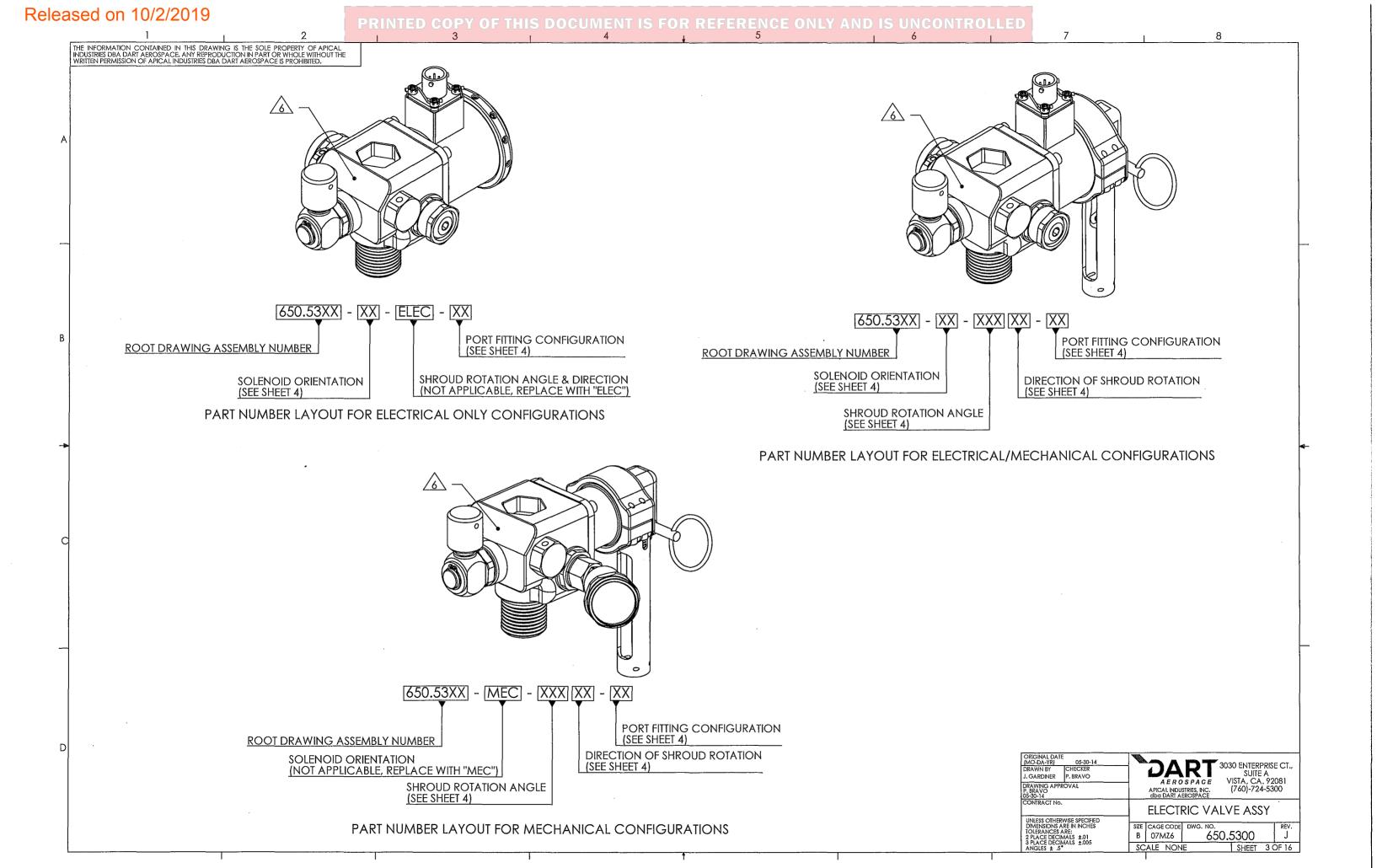
ELECTRIC VALVE ASSY

SHEET 1 OF 16

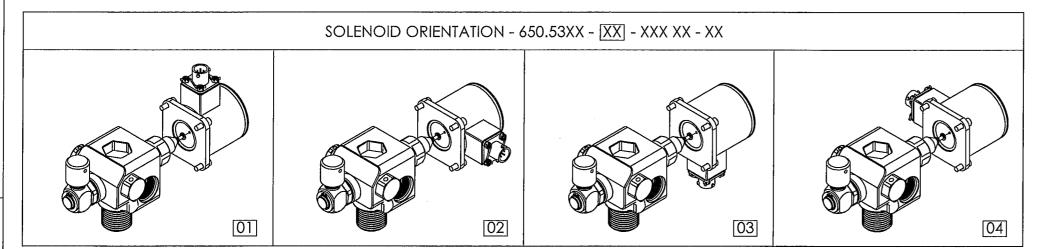
SIZE | CAGE CODE | DWG. NO. | 650.5300

	REVISIONS											
	REV.	DESCRIPTION	DATE	APPROVED								
1	N/C	INITIAL RELEASE	05-30-14	P. BRAVO								
	Α	INCORPORATED ECN 04716	10-17-14	P. BRAVO								
	В	INCORPORATED ECN 04915	04-02-15	P. BRAVO								
	С	INCORPORATED ECN 05044	07-23-15	P. BRAVO								
	D	INCORPORATED ECN 05087	08-14-15	P. BRAVO								
	Е	INCORPORATED ECN 05124	09-01-15	P. BRAVO								
	F	INCORPORATED ECN 05317	02-11-16	P. BRAVO								
	G	INCORPORATED ECN 05343	03-15-16	P. BRAVO								
	Н	INCORPORATED ECN 06036	07-18-18	P. BRAVO								
	J	INCORPORATED ECN 06159	08-20-19	FI P. BRAVO TO								

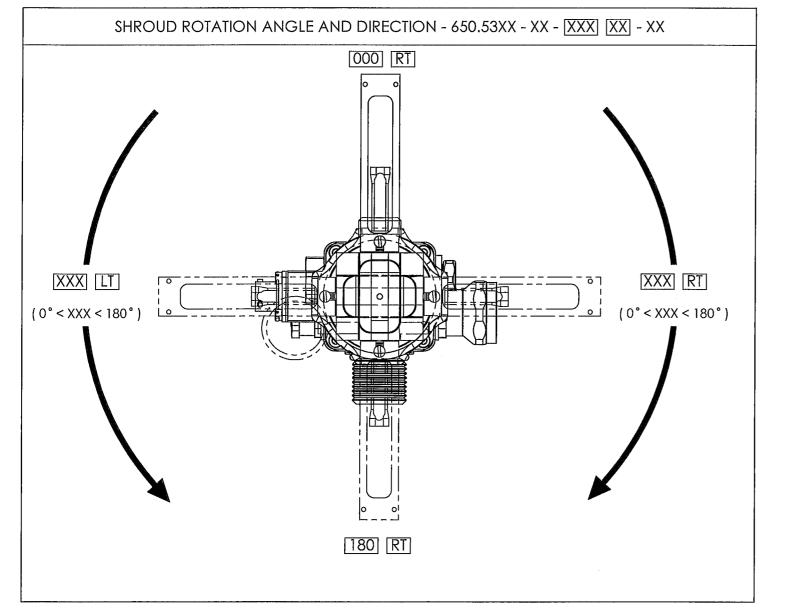
Released on 10/2/2019 PRINTED COPY OF THIS DOCUMENT IS FOR REFERENCE ONLY AND IS UNCONTROLLED THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF APICAL INDUSTRIES DBA DART AEROSPACE. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF APICAL INDUSTRIES DBA DART AEROSPACE IS PROHIBITED. 84 654,0112 CAP RETAINER 83 654,0111 CAP 82 654.0110 MECHANICAL HOUSING AS568A-022 81 601.2590 O-RING 80 650.6215 DUAL BANJO -8 -10 79 601.4331 PRESSURE TRANSDUCER 78 652,4801 90 DEGREE GAUGE ADAPTER AS568A-906 1 | 1 | 1 | 1 | 1 77 601.1090 O-RING 1 A S 1 | 1 76 645.7513 THERMAL ADAPTER 75 601.3847 RECEPTACLE COVER MS3181-8CA 74 651.0101 ANGLED GAUGE ADAPTER 73 601.2246 MS21043-6 LOCKNUT 1 1 72 605.0052 WASHER 3/8", TYPE 316 SS MS20995C20 SAFETY WIRE A/R | 71 |601.1876 1 1 1 1 1 1 1 1 1 1 70 601.3893 O-RING A\$568A-124 12 | 12 12 | 12 12 | 12 | 12 | 12 | 12 OVAL POINT SET SCREW 1 ELECTRIC CAP 1 1 1 | 1 | 1 | 1 | 1 | 1 | 1 68 650.7710 1 1 1 1 67 650,8401 **PLUNGER** 1 | 1 | 1 | 1 | 1 O-RING AS568A-025 A/R A/R LOCTITE 598 A/R A/R A/R A/R A/R A/R A/R A/R 65 601.2045 RTV LOCTITE RETAINING COMPOUND MIL-S-46163 A/R | LOCTITE 248 -925 SKYDROL RES TORQUE SEAL STAINLESS STEEL ANTISEIZE MIL-A-907E O-RING GREASE/LUBRICANT KRYTOX 240AZ DOW CORNING-4 DIELECTRIC GREASE SUPER O-LUBE PARKER 884-2 4 4 4 4 4 4 4 4 4 4 4 57 601.3598 SOCKET HEAD CAP SCREW 1 | 1 1 1 1 1 1 1 1 56 650.6910 SHUTTLE HOUSING ALT, 648,8611 1 1 1 | ALT. 649.0310 1 55 650.7810 PULL ROD 2 2 2 2 2 2 2 AS568A-013 2 2 2 2 2 2 2 2 2 2 54 601.3001 O-RING 2 2 2 2 2 2 2 2 2 2 53 601,3402 O-RING R00390-070-70EP8 1 1 ELECTRIC VALVE BODY ALT. 648.8410 1 | 1 ALT, 649,0213 1 | 1 1 1 1 1 | 1 | 1 | 1 | 51 | 650.7712 CAP CAP RETAINER ALT. 649.0212 1 | 1 | 1 1 50 650,771 1 | 2 2 2 2 2 2 2 2 2 2 2 2 2 49 601.3539 BACK UP RING 1 48 650.7310 ALT. 648.8711 SPRING STOP 1 | 47 601.4369 **THERMOMANOMETER** 1 1 46 600.0295 DIFFUSER CAP -10 A-51975 DIFFUSER CAP -8 1 45 600.0294 44 601.1674 DIFFUSER CAP -6 A-51033 1 43 601,2382 DIFFUSER CAP -4 A-51355 1\4\5 SOCKET HEAD CAP SCREW 4 4 42 601.3377 ALT. 648.8501 1 1 1 SOLENOID ASSY AS568A-019 1 1 1 O-RING AN500-AD4-2 1 1 1 1 / 1 1 1 / 1 1 1 1 39 601.2591 SCREW ALT, 650.1210 1 38 650.7610 TRIGGER 1 | 1 1 1 1 1 1 1 1 37 601.3375 O-RING AS568A-008 1 ALT, 645,7710 1 1 1 1 1 SHROUD 1 1 1 1 36 650.7910 1 | 1 1 | 1 1 1 1 1 1 1 1 1 1 | 1 | 35 | 601,0761 SAFETY PIN SPEC .5312|.5320|.5319|.5318|.5317|.5316|.5315|.5314|.5313|.5312|.5311|.5310|.5309|.5308|.5307|.5306|.5305|.5304|.5303|.5302|.5301|F/N| P/N-DESCRIPTION MATL 3030 ENTERPRISE CT., SUITE A VISTA, CA. 92081 (760)-724-5300 CHECKER J. GARDINER P. BRAVO DRAWING APPROVAL P. BRAVO 05-30-14 CONTRACT No. **ELECTRIC VALVE ASSY** SIZE CAGE CODE DWG. NO. B 07MZ6 650.5300 SCALE NONE SHEET 2 OF 16

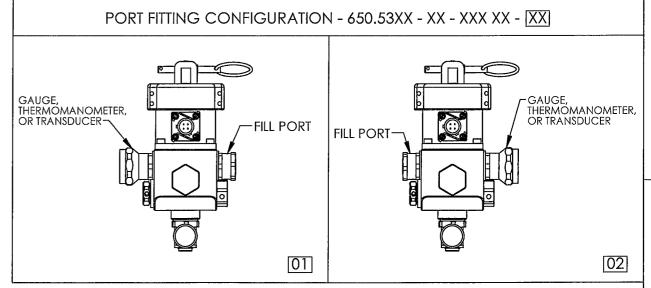


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	TORQUE TABLE	
F/N	DESCRIPTION	VALUE
1	SAFETY DISC RETAINER	20 FT-LBS
5	FILL PORT ADAPTER	35 FT-LBS
6	FILL PORT	30 FT-LBS
7	PLUG FITTING	10 FT-LBS
12	GAUGE	25 FT-LBS
13/14/74 /76/78	GAUGE ADAPTER	35 FT-LBS
15	FUSIBLE PLUG	20 FT-LBS
16/17/18	SWIVEL FITTING	30 FT-LBS
26	DISC RETAINER	10 FT-LBS
42	SOCKET HEAD CAP SCREW	10 FT-LBS
48	SPRING STOP	5 FT-LBS
56	SHUTTLE HOUSING	20 FT-LBS
57	SOCKET HEAD CAP SCREW	15 FT-LBS
69	OVAL POINT SET SCREW	5 FT-LBS
73	LOCKNUT	25 IN-LBS
79	PRESSURE TRANSDUCER	35 FT-LBS
85	THERMOMANOMETER	25 FT-LBS





ORIGINAL DATE (MO-DA-YR)	05-30-14	3030 ENTE	DDDICE CT
1	ECKER Bravo	DAR SUIT	EΑ
DRAWING APPROVA P. BRAVO 05-30-14	AL .		A. 92081 24-5300
CONTRACT No.		ELECTRIC VALVE AS	SY
UNLESS OTHERWISE DIMENSIONS ARE IN TOLERANCES ARE: 2 PLACE DECIMALS	NINCHES t.01	SIZE CAGE CODE DWG. NO. B 07MZ6 650.5300	RE\ J
3 PLACE DECIMALS ANGLES ± .5*	±.005	SCALE NONE SHEET	4 OF 1

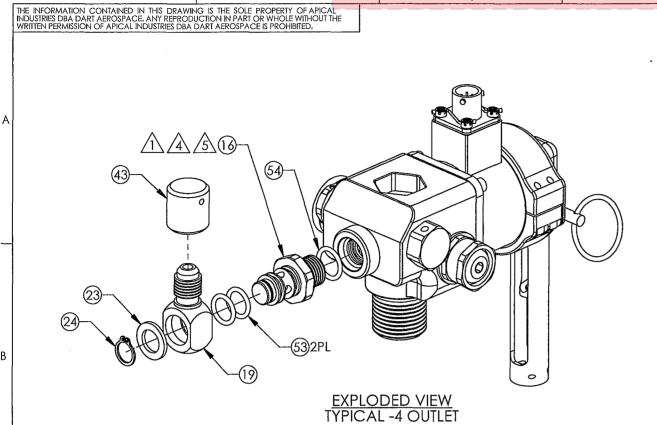
SHEET 5 OF 16

| SIZE | CAGE CODE | DWG. NO. | B | 07MZ6 | 650.5300 | | SCALE | NONE | SHEET

SCALE NONE

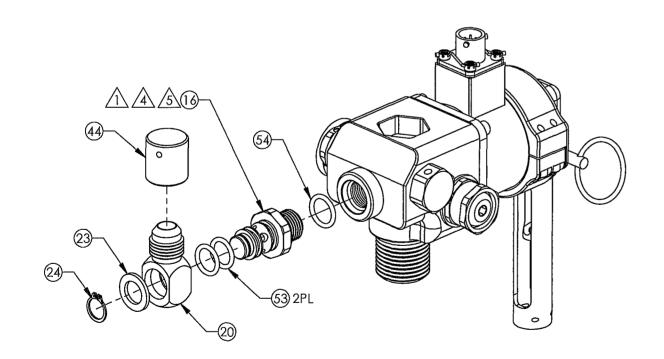
SHEET 7 OF 16

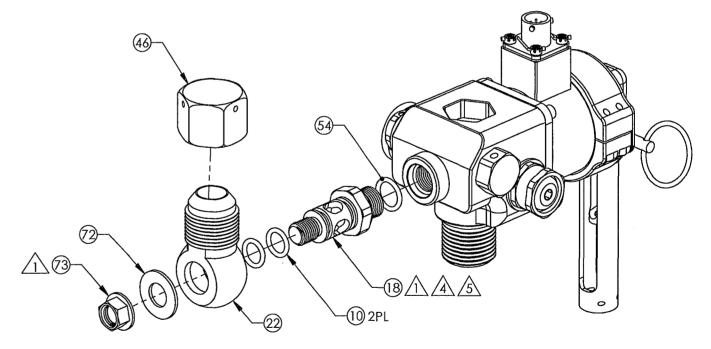
SIZE CAGE CODE DWG. NO.
B 07MZ6 65
SCALE NONE



-53 2PL

EXPLODED VIEW TYPICAL -8 OUTLET

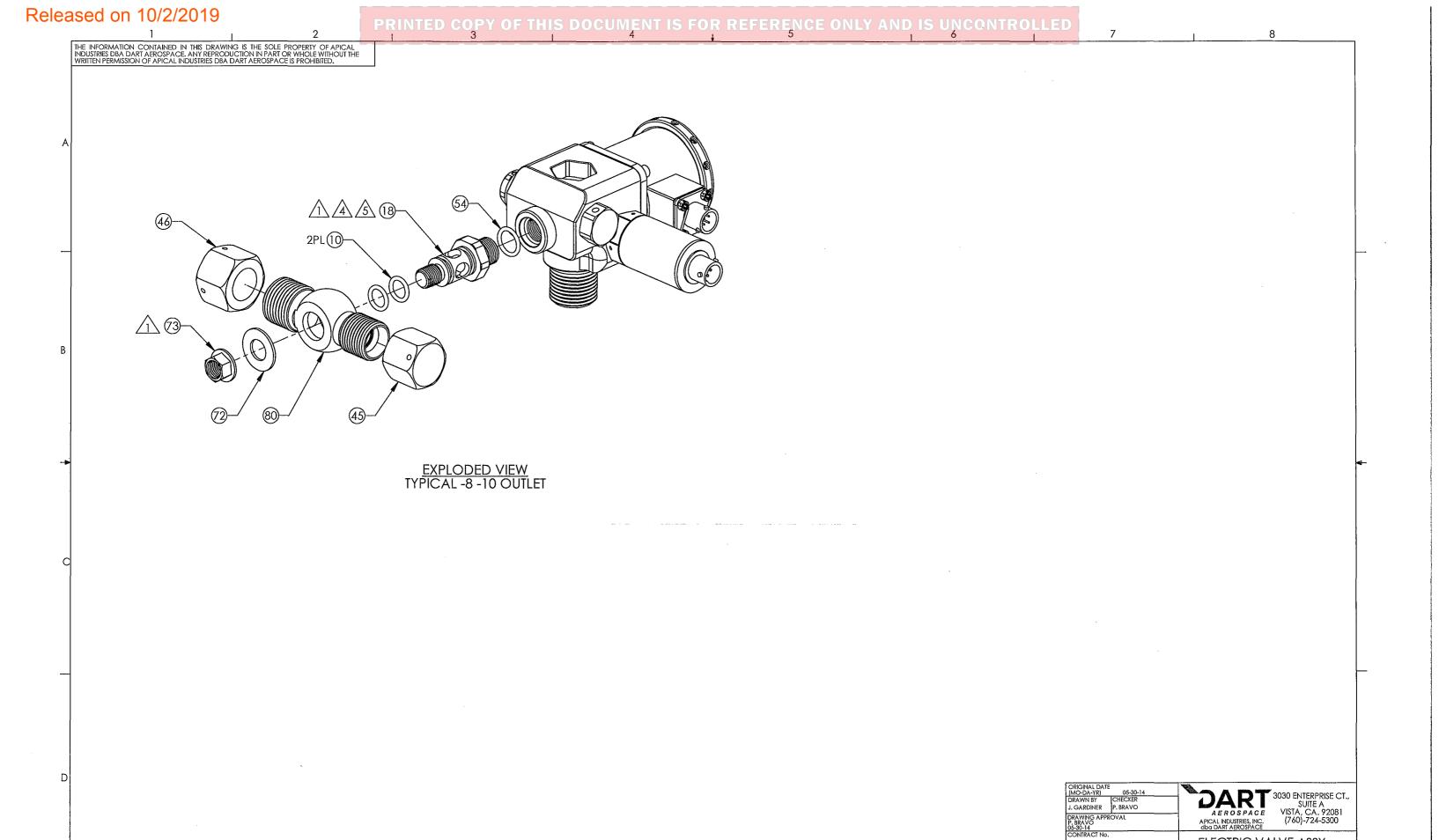




EXPLODED VIEW TYPICAL -10 OUTLET

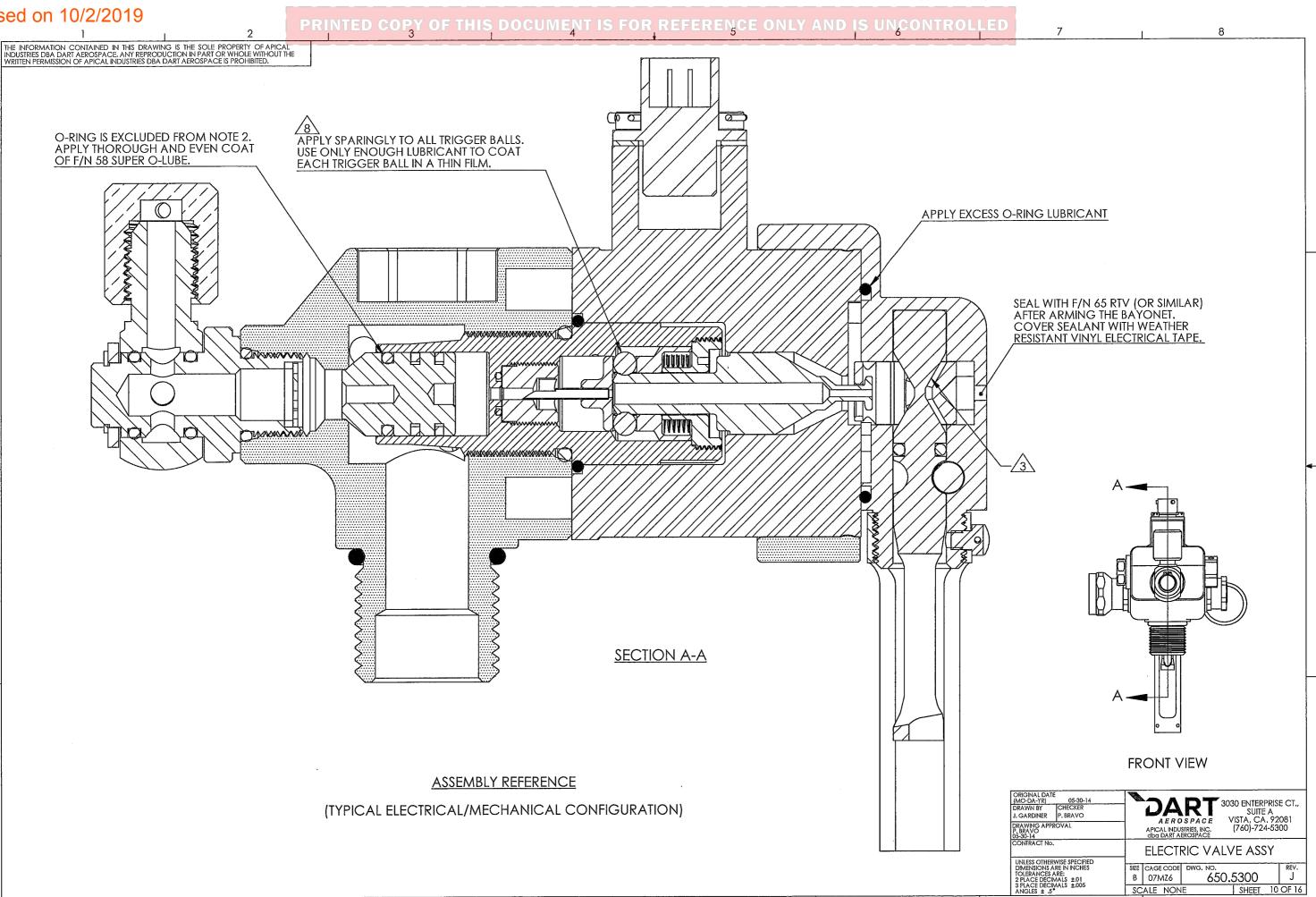
EXPLODED VIEW TYPICAL -6 OUTLET

ORIGINAL DATE (MO-DA-YR) 05-30-14 DRAWN BY CHECKER J. GARDINER P. BRAVO	DART 3030 ENTERPRISE CT., SUITE A VISTA, CA. 92081
DRAWING APPROVAL P. BRAVO 05-30-14	A E R O S P A C E VISTA, CA. 92081 APICAL INDUSTRIES, INC. dod DART A EROSPACE
CONTRACT No.	ELECTRIC VALVE ASSY
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01	SIZE CAGE CODE DWG. NO. B 07MZ6 650.5300 J
3 PLACE DECIMALS ±,005 ANGLES ± ,5"	SCALE NONE SHEET 8 OF 16



SHEET 9 OF 16

SIZE CAGE CODE DWG. NO.
B 07MZ6 65
SCALE NONE

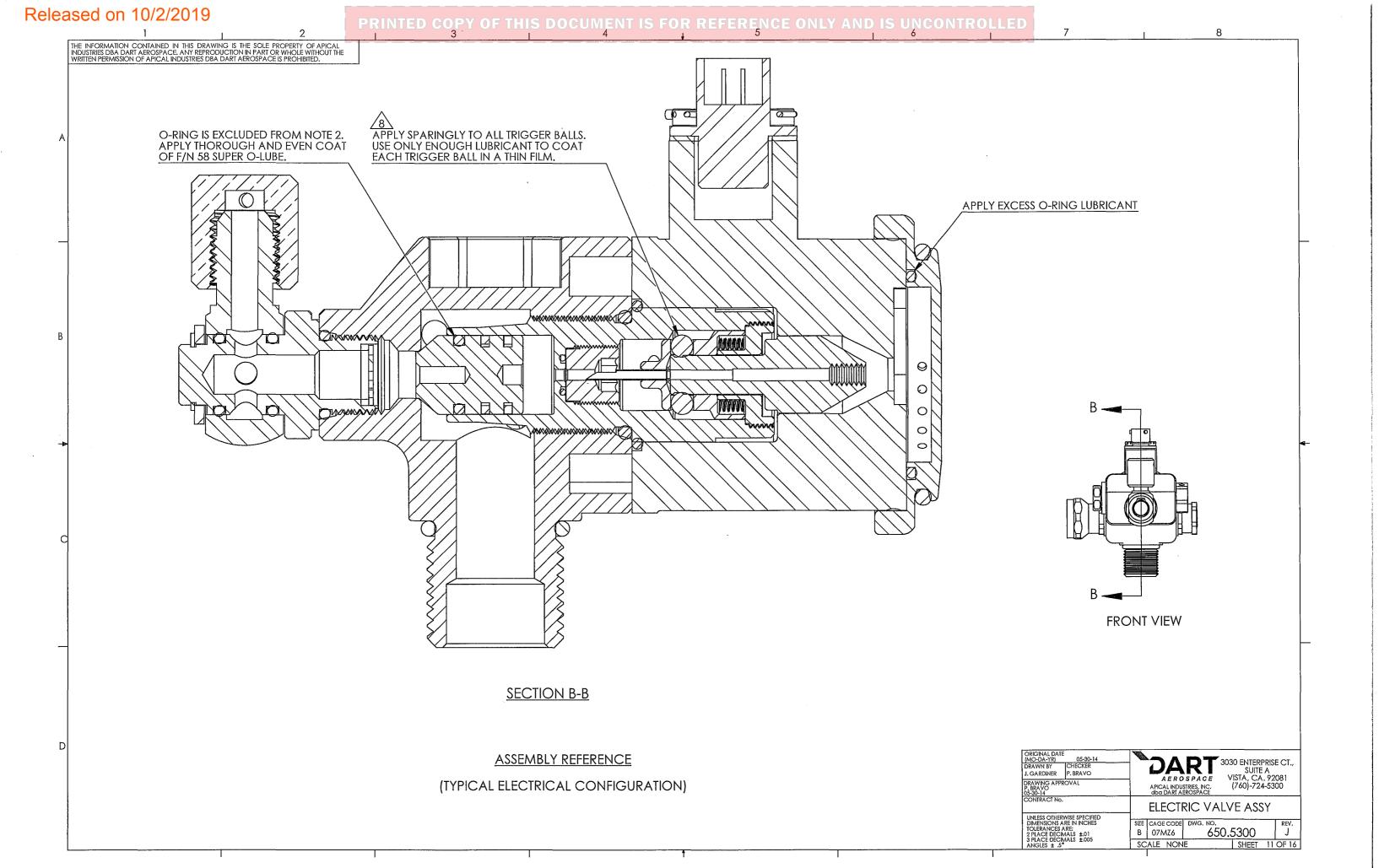


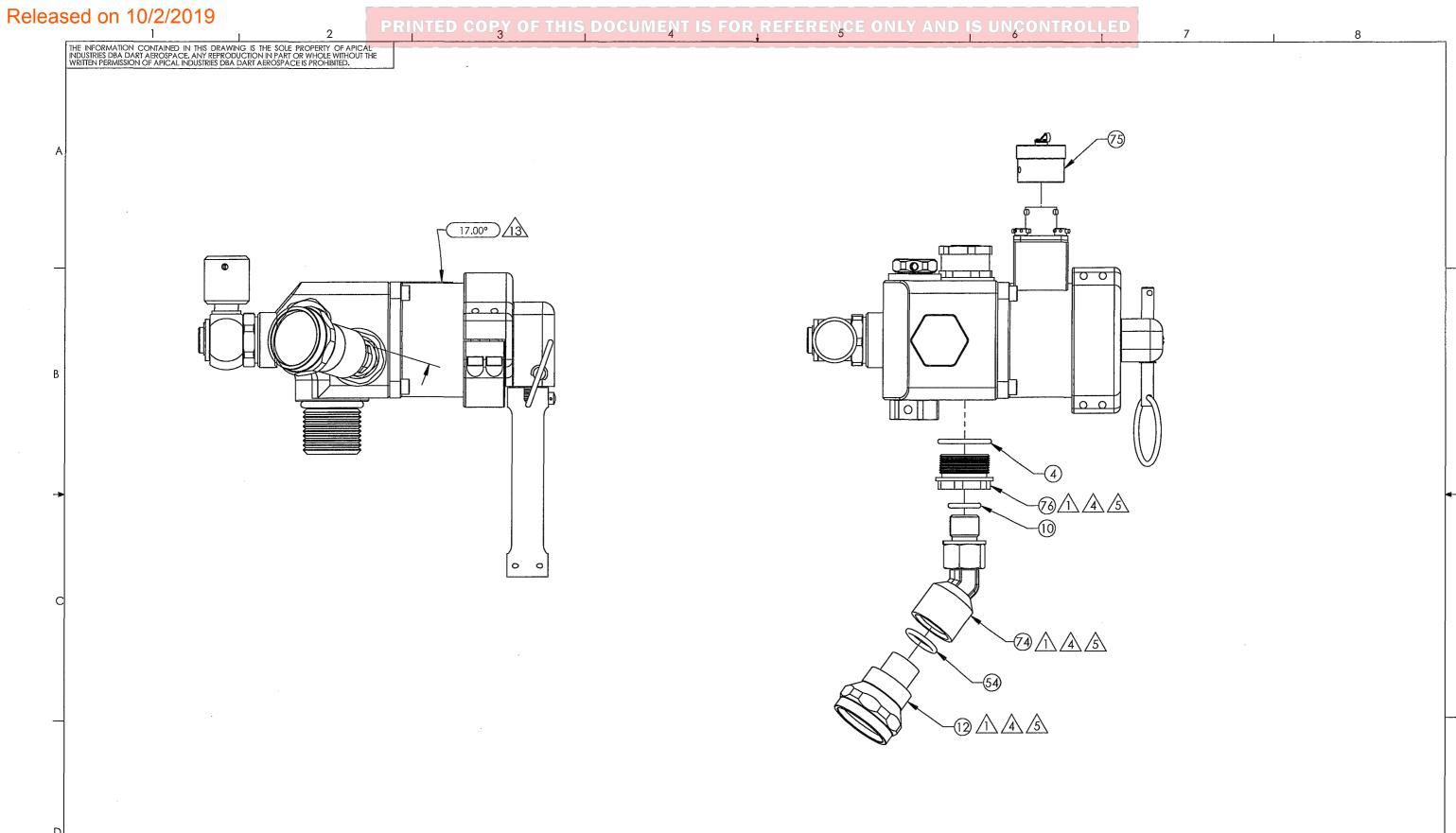
SIZE CAGE CODE DWG, NO.
B 07MZ6 65

SCALE NONE

650.5300

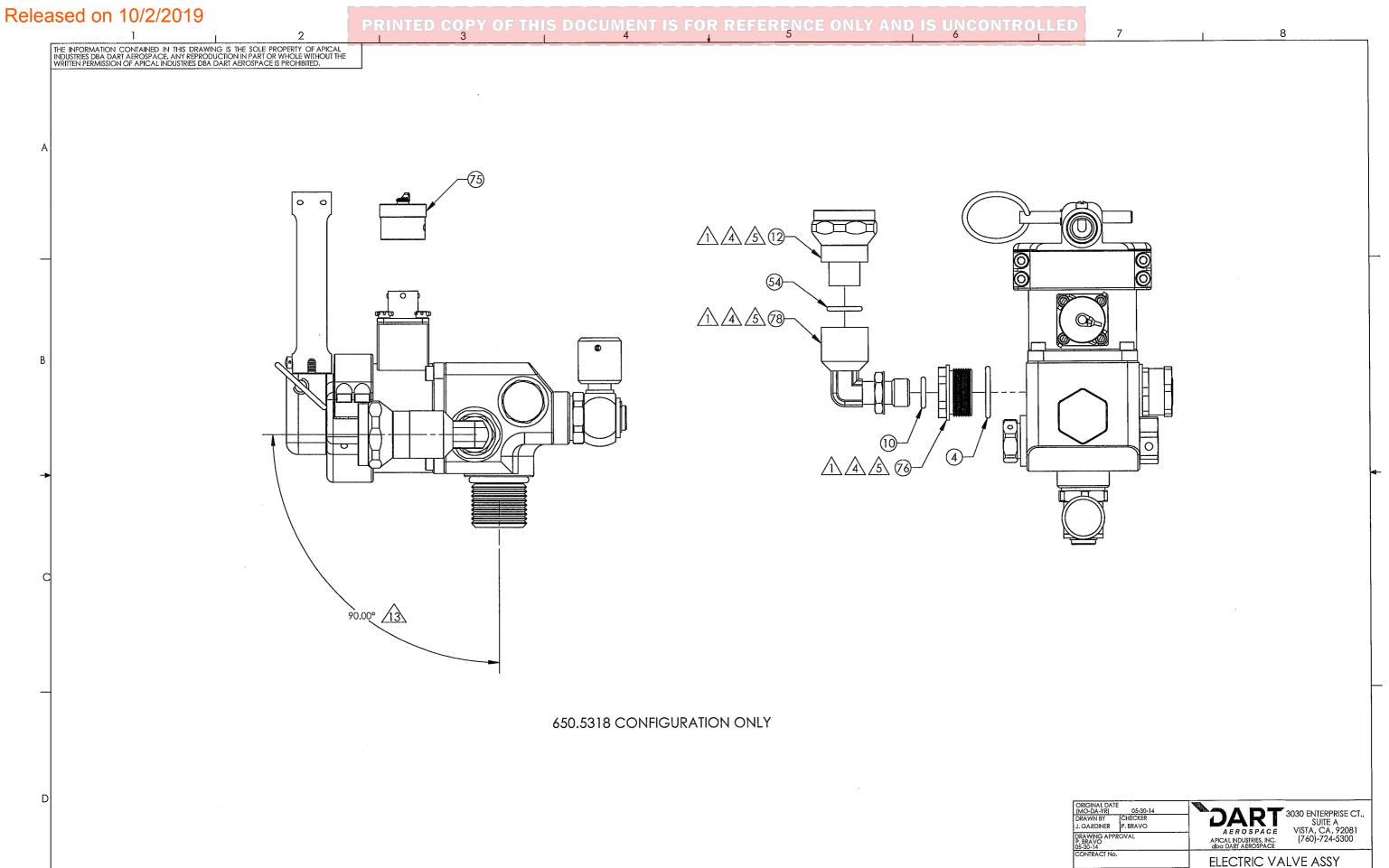
SHEET 10 OF 16





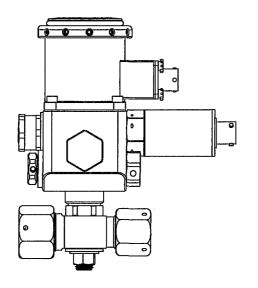
650.5317 CONFIGURATION ONLY

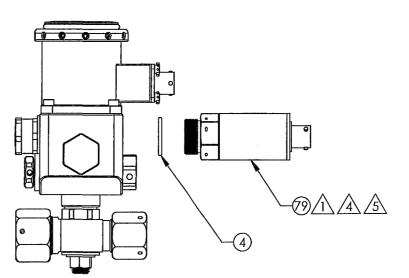
	05-30-14 CHECKER P. BRAVO		AG	RT	3030 ENTERI SUITE	Α
DRAWING APPR P. BRAVO 05-30-14	OVAL		A E R C APICAL INDU dba DART A	S P A C E STRIES, INC. EROSPACE	VISTA, CA (760)-724	
CONTRACT No.			ELECTI	RIC VA	LVE ASS	Υ
UNLESS OTHERY DIMENSIONS AF TOLERANCES A 2 PLACE DECIM	RE IN INCHES RE: IALS ±.01	SIZE B	CAGE CODE 07MZ6		50.5300	REV.
3 PLACE DEC!M ANGLES ± .5	ALS ±.005	SC	ALE NON		SHEET	12 OF 1



UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES ± .5* | SIZE | CAGE CODE | DWG. NO. | REV. | B | 07MZ6 | 650.5300 | J | SCALE | NONE | SHEET | 13 OF 16 THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF APICAL INDUSTRIES DBA DART AEROSPACE, ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF APICAL INDUSTRIES DBA DART AEROSPACE IS PROHIBITED.

1





650.5319 CONFIGURATION ONLY

ORIGINAL DATE
(MO-DA-YR) 05-30-14

DRAWN BY CHECKER
J. GARDINER P. BRAVO

DRAWING APPROVAL
P. BRAVO
05-30-14

CONTRACT NO.

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
1 OLERANCES ARE:
1 OLERANCES ARE:
2 PLACE DECIMALS ±.01
3 PLACE DECIMALS ±.01
3 PLACE DECIMALS ±.05
ANGLES ±.5°

SCALE

A EROS PAGE
APICAL INDUSTRIES, INC., dob DART A EROSPACE

ELECTRIC VALVE ASSY

ELECTRIC VALVE ASSY

CAGE CODE DWG, NO.

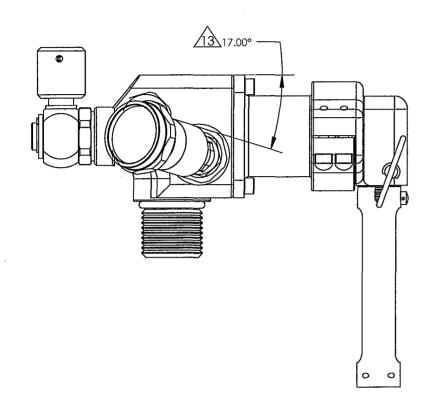
| SZE | CAGE CODE | DWG. NO. | REV. | B | 07MZ6 | 650.5300 | J | SCALE | NONE | SHEET | 14 OF 16

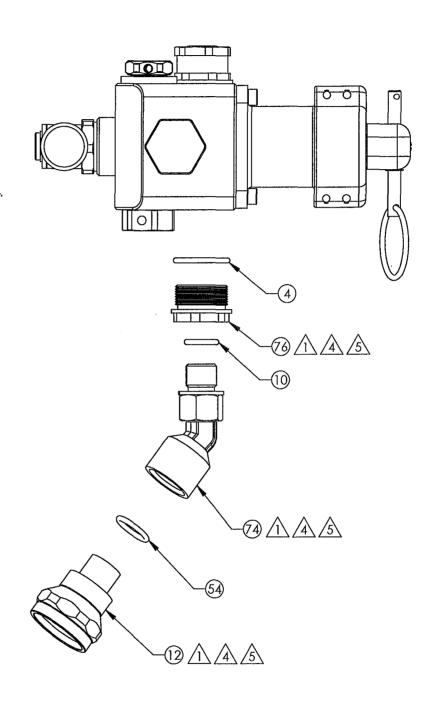
SHEET 15 OF 16

SZE CAGE CODE DWG. NO. B 07MZ6 650.5300

SCALE NONE

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650.5321 CONFIGURATION ONLY

ORIGINAL DAT (MO-DA-YR) DRAWN BY J. GARDINER	05-30-14 CHECKER P. 8RAVO			K	3030 ENTERI SUITE	Α	
DRAWING APP P. BRAVO 05-30-14			A E R O S APICAL INDUST dba DART AER	RIES, INC.	VISTA, CA (760)-724		
CONTRACT No			ELECTR	IC VA	LVE ASS	Ϋ́	
TOLERANCES 2 PLACE DECI	MALS ±.01	1 1	O7MZ6	DWG, NO.	0.5300		RE
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